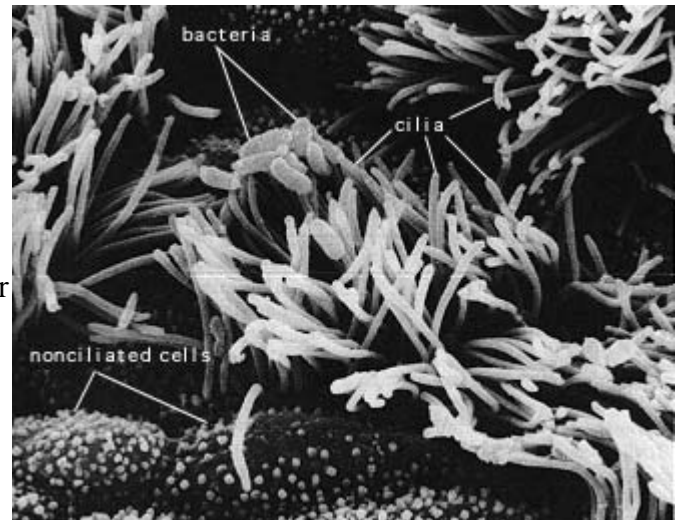


PERTUSSIS (WHOOPING COUGH)

What is it?

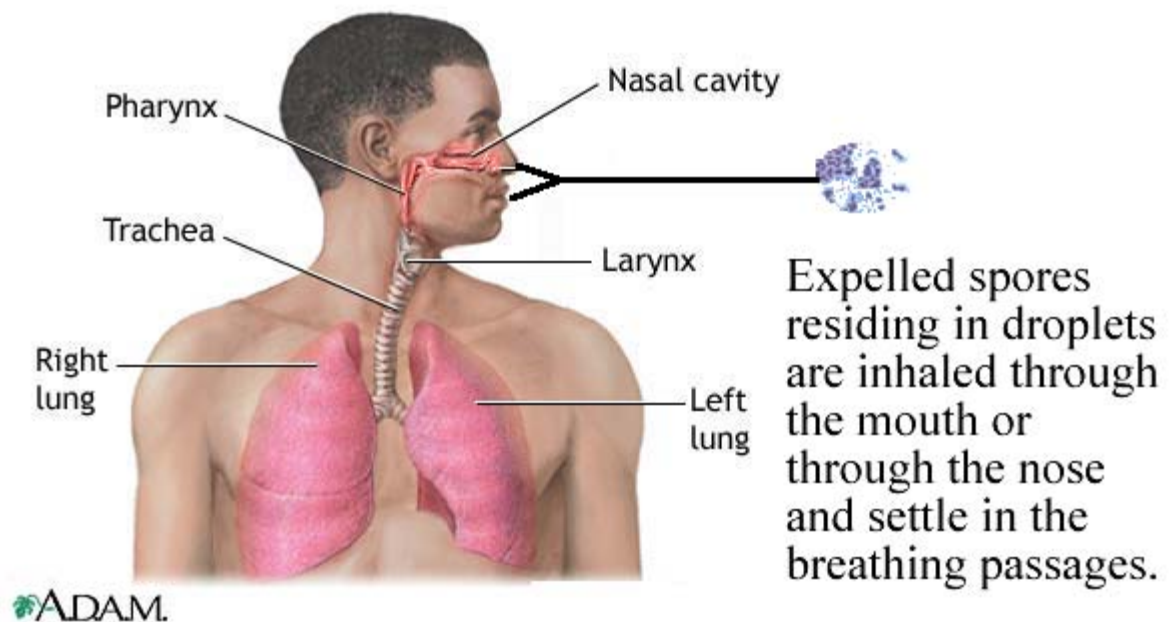
Pertussis, commonly known as "whooping cough," is an infection of the respiratory tract caused by *Bordetella pertussis* bacteria. A pertussis infection is very contagious and can be quite serious. People become infected with *Bordetella pertussis* bacteria by inhaling contaminated droplets from an infected person's cough or sneeze. Once inside the airways, pertussis bacteria produce chemical substances (toxins) that interfere with the respiratory tract's normal ability to eliminate germs. Pertussis bacteria also produce chemicals that cause inflammation, damaging the lining of the breathing passages.



Although most infants in the United States are now immunized against pertussis, this immunity usually fades as a person enters early adulthood. This means that almost all American adults and teenagers are potential targets for pertussis infection. About 90 percent of nonimmune family members are likely to develop pertussis if they live in the same household as someone who has the illness. Currently, 25 percent of pertussis cases in the United States occur among adolescents and adults (often in nursing homes and on college

campuses). In fact, adults and teenagers (who are not usually diagnosed as having pertussis) are now a major source for spreading pertussis to infants and children.

Once an unimmunized child has been infected after exposure to a person with pertussis, it usually takes three days to 21 days for symptoms to begin.



What are the symptoms?

The first symptoms of pertussis may be similar to those of a common cold, including nasal congestion, runny nose, sneezing, red and watery eyes, mild fever, and a dry cough. After about one week to 2 weeks, the dry cough becomes a wet cough that brings up thick, stringy mucus. At the same time, coughing begins to occur in long spells that may last for over a minute, sometimes causing a child to turn red from effort or blue from lack of oxygen. At the end of a coughing spell, the child gasps for air with a characteristic "whooping" sound. Infants may not whoop at all or as loudly as older children.

Severe coughing spells can lead to vomiting and may make it hard for a child to eat or drink. Severe coughing can also cause petechiae (tiny, red spots caused by ruptures in blood vessels at the skin's surface) in the skin of the upper body, as well as small areas of bleeding in the whites of the eyes. Coughing spells can continue for several weeks.

Because adults and adolescents with pertussis may have milder symptoms, they may be thought to simply have "bronchitis."

How is it treated?

Your doctor can confirm pertussis by taking cultures of respiratory fluids for examination in the laboratory. This involves taking a sample of secretions from the nose or throat and identifying the pertussis bacteria in the secretions. Blood tests and a chest X-ray may also be done.

Pertussis is treated with antibiotics, usually erythromycin. Some experts believe that treatment is most effective when antibiotics are started early in the course of the illness. Follow your doctor's schedule for giving antibiotic medication. Antibiotics are also very important in stopping the spread of pertussis bacteria from the infected child to other people. Ask your doctor's advice about the need for giving prophylactic (preventive) antibiotics or vaccine boosters to others in your household.

Follow your doctor's advice about dealing with pertussis coughing spells. The pertussis cough can cause your child to vomit, losing the nutrients that he needs to recover his strength. To help decrease the chance of vomiting, give frequent meals with small portions. Encourage your child to drink water, fruit juice, and clear soups to prevent dehydration.

In some cases, a child with pertussis may need treatment in a hospital. Almost all infants with pertussis who are less than six months old receive hospital treatment for their illness, and about 40 percent of older babies with pertussis are also hospitalized. Many of these children have pneumonia associated with this infection. Other possible complications of pertussis include apnea, ear infection, and seizures.

While in the hospital, a child with pertussis may need suctioning of thick respiratory secretions. His breathing will be monitored, and he may need extra oxygen. The child will be isolated from other patients, with special precautions to prevent his infection from spreading to others.

How long does it last?

Pertussis lasts for several weeks or longer. There are usually two weeks of common cold symptoms, followed by two weeks of severe coughing, followed by two weeks of a convalescent period when coughing occurs less often. In some children, the convalescent stage may last for months.

How can pertussis be prevented?

Pertussis can be prevented by the pertussis vaccine, which is part of the DTaP (diphtheria, tetanus, acellular pertussis) or DTP immunizations. These important immunizations are routinely given in five doses before a child's sixth birthday. The pertussis vaccine has dramatically decreased the number of cases of whooping cough that occur each year and saved countless lives.

Prophylactic (preventive) oral antibiotics should be given to anyone who lives in the same household as someone with pertussis. Others who have had close contact with the infected person, including day-care staff and students, should also receive prophylactic antibiotic treatment.

When should the doctor be called?

Call your doctor immediately if you suspect that your child has pertussis. Also, call your doctor if your child has been exposed to someone with pertussis, even if your child has already received all of his scheduled DTaP or DTP immunizations.

Call your doctor if your child has prolonged, severe coughing spells, especially if these spells make the child turn red or blue, are followed by vomiting, or occur together with a "whooping" sound when the child breathes in.

[Click here to HEAR a child with pertussis.](#)

[Click here to SEE a video of a child with pertussis.](#)